Section 11. Database Design

11.1 Introduction

The LPGS database provides the communication between the subsystems for product requests, work order creation, processing, status, trending data, operational support, etc. for the LPGS system.

During the preliminary design phase, a logical database design was established to incorporate the functional data requirements and the interface between the database and the LPGS subsystems.

11.2 Logical Design

The goal of logical design is to provide an accurate model of the information needs of the organization. This model is diagrammed in an entity relationship diagram (ERD), which expresses the data model in terms of entities, relationships, and attributes. The ERD also provides a model which is independent of any particular data storage and access method and allows objective decisions to be made about implementation techniques and coexistence with existing systems. The logical design is independent of any particular physical implementation but is used to establish the physical database design.

Entity Relationship Modeling involves identifying the items of importance in an organization (entities), the properties of those items (attributes), and how they are related to one another (relationships). The LPGS Entity Relationship Model is expressed conceptually as an ERD (see Figure 11–1). These items are described in more detail in the following paragraphs.

11.2.1 Entities

Entities represent data items that play a functional role in the LPGS application and have their own set of attributes. An entity is a thing or object of significance about which information needs to be known or held. Each entity is expressed on the ERD as a box. The name of the entity is in bold followed by names of the attributes associated with the entity.

11.2.2 Attributes

Attributes are details that serve to either express the state of, qualify, identify, classify, or quantify an entity. Each attribute on the ERD is defined as either a primary key (#) attribute, a mandatory (*) attribute, or an optional (o) attribute. Primary keys are used to uniquely define an occurrence of the entity. Mandatory attributes require a data value at all times; optional attributes may be left null.

11.2.3 Relations

A relation is a significant association between two entities that is given a name. Relationships represent the association between the occurrences of one or more entities that are of interest to the LPGS. There is a cardinality associated with each relationship. The cardinality describes

the

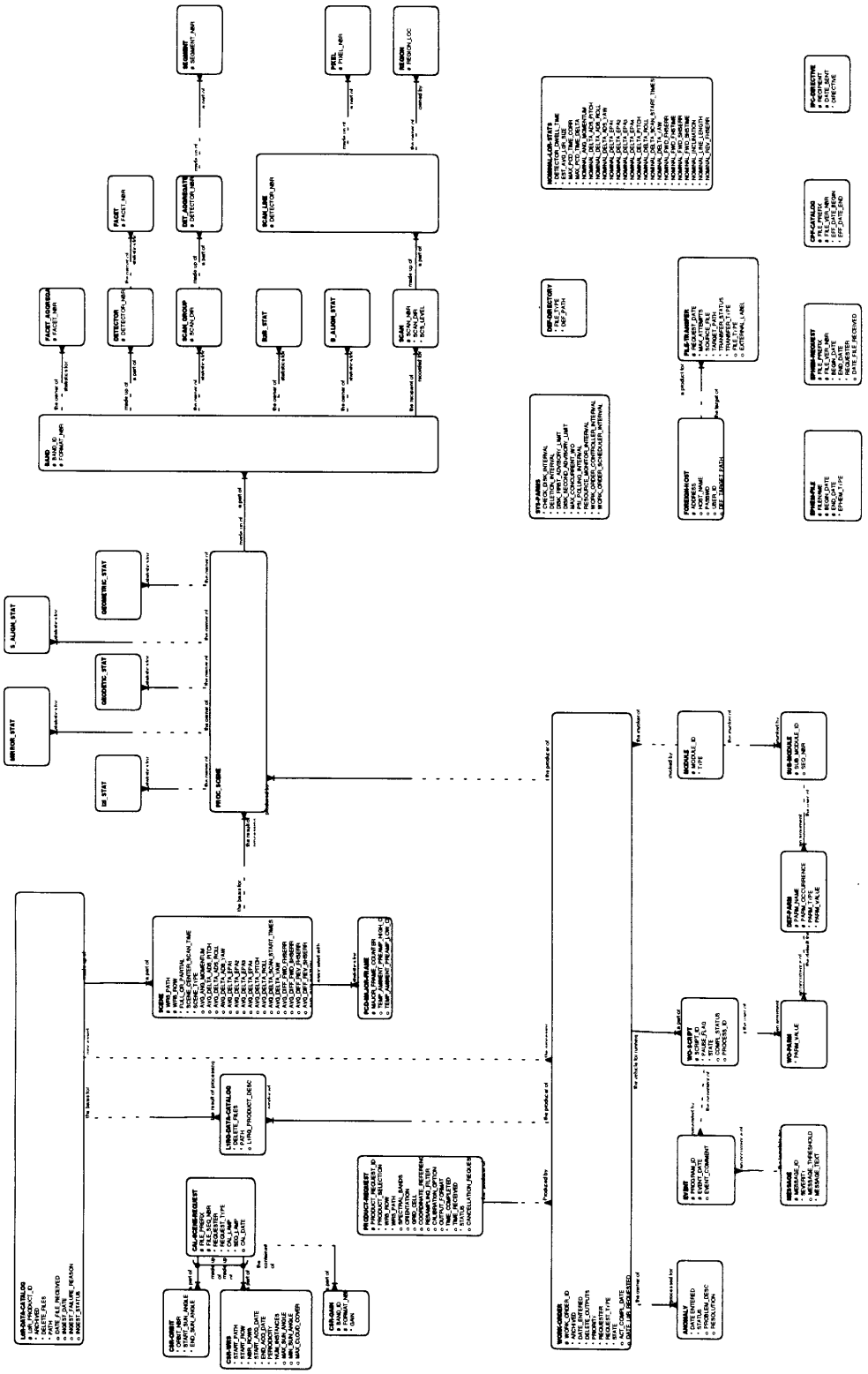
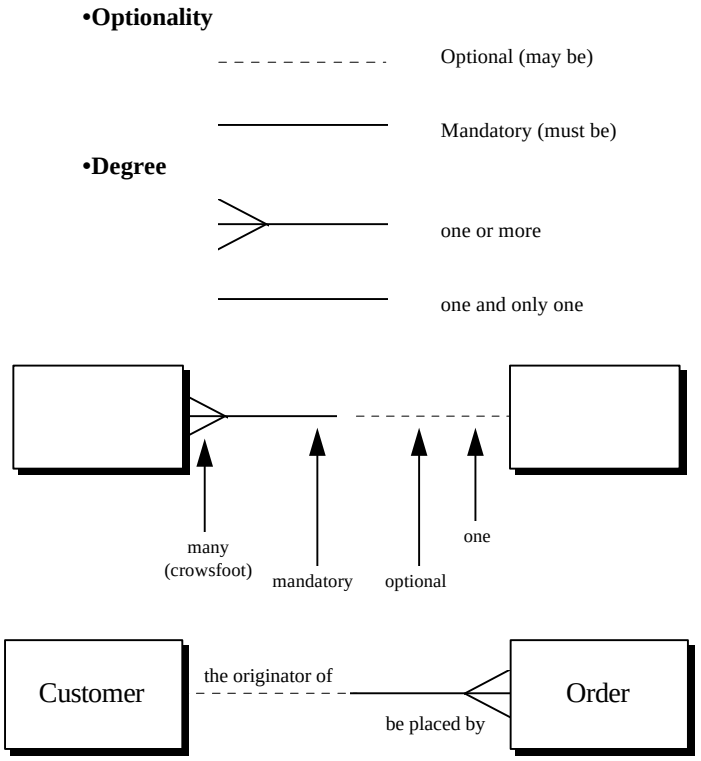


Figure 11–1. LPGS Entity Relationship Diagram

number of occurrences of one entity that can be associated with each occurrence of the related entity. Relationships on the ERD is expressed using the following symbols.



For example:

Each **Customer** may be the originator of one or more **Order**.
Each **Order** must be placed by one and only one **Customer**.

11.2.4 Design Tool

The functional design for LPGS was developed using Oracle's Designer/2000 tool. The following ERD, entity descriptions, and entity definition reports were generated directly from Designer/2000 for this document. These reports, along with the ERD, provide the necessary information needed to fully communicate the logical design. The information contained in the tool provides the foundation for the physical design of the LPGS database. The physical design will be completed during the detailed design phase.

Table 11–1 presents the entities and their descriptions and Table 11–2 details each entity in the ERD.

Entity Name	Short Name	Description
ANOMALY	ANO	Used to track processing of the anomaly for a work order.
B2B_STAT	B2B	Holds band-to-band trending statistics.
BAND	BAND	Holds trending statistics by band.
B_ALIGN_STAT	BAS	Holds band alignment trending statistics.
CAL-SCENE-REQUEST	CSR	Records calibration data requests entered by the user through the GUI.
CPF-CATALOG	CPF	Contains a catalog of Calibration Parameter files generated by IAS.
CSR-GAIN	CSRG	Defines the desired gain for each band of a calibration scene request.
CSR-ORBIT	CSRO	Contains the details defining an orbit based calibration scene request.
CSR-WRS	CSRW	Contains the details defining a WRS based calibration scene request

Table 11-1. Entities and Their Descriptions (1 of 6)

Entity Name	Short Name	Description
DEF-DIRECTORY	DD	Contains default directory paths for different types of files.
DEF-PARM	DP	Contains the default parameters for the IAS application programs.
DETECTOR	DET	Holds trending statistics by detector within a band.
DET_AGGREGATE	DA	Holds trending statistics by scan direction and detector.
EPHEM-FILE	EF	Contains a catalog of FDF ephemeris files received by IAS.
EPHEM-REQUEST	ER	Used to track requests for FDF ephemeris.
EVENT	EVENT	Contains a log of significant system events, e.g., alarms, alerts, etc.
FACET	FCT	Holds trending statistics by detector and facet.
FACET_AGGREGATE	FA	Holds trending statistics by band and facet.

Table 11-1. Entities and Their Descriptions (2 of 6)

Entity Name	Short Name	Description
FILE-TRANSFER	FT	Contains information to track file transfers to foreign hosts.
FOREIGN-HOST	FH	Contains information about foreign hosts to whom we transmit files.
GEODETIC_STAT	GEOD	Holds geodetic trending statistics for a work-order-processed scene.
GEOMETRIC_STAT	GEOM	Holds geometric accuracy trending statistics for a work-order-processed scene.
I2I_STAT	I2I	Holds image-to-image trending statistics for a work-order-processed scene.
IPC-DIRECTIVE	IPC	Contains inter-process communication directives
L0R-DATA-CATALOG	L0R	Contains a catalog of L0R products.
L1RG-DATA-CATALOG	L1RG	Contains a catalog of L1R and L1G products that are the outputs from running a work order against a L0R image.
MESSAGE	MSG	Contains a catalog of standard messages.

Table 11-1. Entities and Their Descriptions (3 of 6)

Entity Name	Short Name	Description
MIRROR_STAT	MS	Holds scan mirror trending statistics for a work-order-processed scene.
MODULE	MOD	Allows creation of various levels of application software "building blocks", e.g., procedures, scripts, and programs.
NOMINAL-L0R-STATS	NLS	Contains nominal L0R statistics for comparison against actual L0R products during ingest.
PCD-MAJOR-FRAME	PMF	Contains statistics, used for trend analysis, about PCD major frames contained in a L0R product. The statistics are generated during ingest.
PIXEL	PIX	Holds trending statistics by pixel.
PROC_SCENE	PS	Holds trending statistics for each work-order-processed scene.
PRODUCT-REQUEST	PR	Contains information pertaining to a product request.
REGION	REGION	Holds trending statistics by region.

Table 11-1. Entities and Their Descriptions (4 of 6)

Entity Name	Short Name	Description
SCAN	SCAN	Holds trending statistics by scan number.
SCAN_GROUP	SG	Holds trending statistics by scan direction.
SCAN_LINE	SL	Holds trending statistics for each scan line (scan number cross-referenced by detector).
SCENE	SCENE	Contains statistics, used for trend analysis, about scenes contained in a L0R product. The statistics are generated during ingest.
SEGMENT	SEG	Holds trending statistics by segment.
SUB-MODULE	SM	Allows the definition of sub-modules for modules (e.g., procedures are made up of scripts, and scripts are made up of programs).
SYS-PARMS	SYS	Contains system-wide parameters
S_ALIGN_STAT	SAS	Holds sensor alignment trending statistics for a work-order-processed scene.

Table 11-1. Entities and Their Descriptions (5 of 6)

Entity Name	Short Name	Description
WO-PARM	WP	Identifies the actual parameters to be used by a program in a WO-Procedure.
WO-SCRIPT	WS	Contains information about a script which is part of a work-order's procedure.
WORK-ORDER	WO	Contains information pertaining to a work order.

Table 11-1. Entities and Their Descriptions (6 of 6)

Table 11–2. ERD Entities (1 of 52)

Entity Name : ANOMALY

Short Name : ANO

Sub-type of :

Initial Volume : Average Volume :

Maximum Volume : Annual Growth% :

Description - has Significance as

Used to track processing of the anomaly for a work order.

Attributes

Name	Domain	Opt	Format	Length
DATE ENTERED		N	DATE	
STATUS		N	CHAR	1
PROBLEM_DESC		Y	VARCHAR2	80
RESOLUTION		Y	CHAR	1

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE processed for one and only one WORK-ORDER *

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (2 of 52)

Entity Name : B2B_STAT

Short Name : B2B

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds band-to-band trending statistics.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one BAND *

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (3 of 52)

Entity Name : BAND
Short Name : BAND

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by band.

Attributes

Name	Domain	Opt	Format	Length	
BAND_ID		N	NUMBER	1,0	*
FORMAT_NBR		N	NUMBER	1,0	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	made up of one or more	DETECTORS
MAY BE	the owner of one or more	B2B_STATS
MAY BE	the owner of one or more	B_ALIGN_STATS
MAY BE	the owner of one or more	FACET_AGGREGATES
MAY BE	the owner of one or more	SCAN_GROUPS
MUST BE	a part of one and only one	PROC_SCENE
MUST BE	the recipient of one or more	SCANS

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (4 of 52)

Entity Name : B_ALIGN_STAT

Short Name : BAS

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds band alignment trending statistics.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one BAND

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (5 of 52)

Entity Name : CAL-SCENE-REQUEST

Short Name : CSR

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Records calibration data requests entered by the user through the GUI.

Attributes

Name	Domain	Opt	Format	Length	
CAL_LAMP	TRUE/FALSE	N	NUMBER	1,0	
FILE_PREFIX		N	VARCHAR2	15	*
FILE_SEQ_NBR		N	NUMBER	2,0	*
REQUESTER		N	VARCHAR2	15	
REQUEST_TYPE		N	VARCHAR2	3	
SEQ_LAMP		N	NUMBER	1,0	
CAL_DATE		Y	DATE		

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE	made up of one or more	CSR-ORBITS
or MUST BE	made up of one or more	CSR-WRS
MAY BE	the container of one or more	CSR-GAINS

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (6 of 52)

Entity Name : CPF-CATALOG

Short Name : CPF

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains a catalog of Calibration Parameter files generated by IAS.

Attributes

Name	Domain	Opt	Format	Length	
EFF_DATE_BEGIN		N	TIMESTAMP		
EFF_DATE_END		N	TIMESTAMP		
FILE_PREFIX		N	CHAR	15	*
FILE_VER_NBR		N	INTEGER	2	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (7 of 52)

Entity Name : CSR-GAIN

Short Name : CSRG

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Defines the desired gain for each band of a calibration scene request.

Attributes

Name	Domain	Opt	Format	Length	
BAND_ID		N	NUMBER	1,0	*
FORMAT_NBR		N	NUMBER	1,0	*
GAIN		N	CHAR	1	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE a part of one and only one CAL-SCENE-REQUEST

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (8 of 52)

Entity Name : CSR-ORBIT

Short Name : CSRO

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains the details defining an orbit based calibration scene request.

Attributes

Name	Domain	Opt	Format	Length
END_SUN_ANGLE		N	NUMBER	4,2
ORBIT_NBR		N	NUMBER	5,0
START_SUN_ANGLE		N	NUMBER	4,2

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE a part of one and only one CAL-SCENE-REQUEST

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (9 of 52)

Entity Name : CSR-WRS

Short Name : CSRW

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains the details defining a WRS based calibration scene request

Attributes

Name	Domain	Opt	Format	Length
END_ACQ_DATE		N	DATE	
NBR_ROWS		N	NUMBER	2,0
NUM_INSTANCES		N	NUMBER	2,0
PERIODICITY		N	NUMBER	3,0
START_ACQ_DATE		N	DATE	
START_PATH		N	NUMBER	3,0
START_ROW		N	NUMBER	3,0
MAX_CLOUD_COVER		Y	NUMBER	2,0
MAX_SUN_ANGLE		Y	NUMBER	4,2
MIN_SUN_ANGLE		Y	NUMBER	4,2

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE a part of one and only one CAL-SCENE-REQUEST

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (10 of 52)

Entity Name : DEF-DIRECTORY

Short Name : DD

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains default directory paths for different types of files.

Attributes

Name	Domain	Opt	Format	Length
DEF_PATH		N	VARCHAR2	80
FILE_TYPE		N	VARCHAR2	4

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (11 of 52)

Entity Name : DEF-PARM
Short Name : DP

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains the default parameters for the IAS application programs.

Attributes

Name	Domain	Opt	Format	Length	
PARM_NAME		N	VARCHAR2	15	*
PARM_OCCURRENCE		N	INTEGER	2	*
PARM_TYPE		N	VARCHAR2	8	
PARM_VALUE		N	VARCHAR2	25	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	the default for one or more	WO-PARMS
MUST BE	an argument for one and only one	SUB-MODULE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (12 of 52)

Entity Name : DETECTOR

Short Name : DET

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by detector within a band.

Attributes

Name	Domain	Opt	Format	Length	
DETECTOR_NBR		N	NUMBER	2,0	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	the owner of one or more	FACETS
MUST BE	a part of one and only one	BAND

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (13 of 52)

Entity Name : DET_AGGREGATE

Short Name : DA

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by scan direction and detector.

Attributes

Name	Domain	Opt	Format	Length
DETECTOR_NBR		N	NUMBER	2,0

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	made up of one or more	SEGMENTS
MUST BE	a part of one and only one	SCAN_GROUP

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (14 of 52)

Entity Name : EPHEM-FILE

Short Name : EF

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains a catalog of FDF ephemeris files received by IAS.

Attributes

Name	Domain	Opt	Format	Length	
BEGIN_DATE		N	TIMESTAMP		*
END_DATE		N	TIMESTAMP		*
EPHEM_TYPE		N	CHAR	1	
FILENAME		N	VARCHAR2	19	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (15 of 52)

Entity Name : EPHEM-REQUEST

Short Name : ER

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Used to track requests for FDF ephemeris.

Attributes

Name	Domain	Opt	Format	Length	
BEGIN_DATE		N	TIMESTAMP		
END_DATE		N	TIMESTAMP		
FILE_PREFIX		N	VARCHAR2	15	*
FILE_VER_NBR		N	INTEGER	2	*
REQUESTER		N	VARCHAR2	15	
DATE_FILE_RECEIVED		Y	TIMESTAMP		

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (16 of 52)

Entity Name : EVENT

Short Name : EVENT

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% :

Description - has Significance as

Contains a log of significant system events, e.g., alarms, alerts, etc.

Attributes

Name	Domain	Opt	Format	Length	
EVENT_DATE		N	TIMESTAMP		*
PROGRAM_ID		N	VARCHAR2	15	*
EVENT_COMMENT		Y	VARCHAR2	80	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	generated by one and only one	WO-SCRIPT
MUST BE	an occurrence of one and only one	MESSAGE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (17 of 52)

Entity Name : FACET
Short Name : FCT

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by detector and facet.

Attributes

Name	Domain	Opt	Format	Length	
FACET_NBR		N	NUMBER	1,0	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one DETECTOR

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (18 of 52)

Entity Name : FACET_AGGREGATE

Short Name : FA

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by band and facet.

Attributes

Name	Domain	Opt	Format	Length	
FACET_NBR		N	NUMBER	3,0	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one BAND

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (19 of 52)

Entity Name : FILE-TRANSFER
Short Name : FT

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains information to track file transfers to foreign hosts.

Attributes

Name	Domain	Opt	Format	Length	
MAX_ATTEMPTS		N	INTEGER	1	
REQUEST_DATE		N	TIMESTAMP		*
SOURCE_FILE		N	VARCHAR2	80	
TARGET_PATH		N	VARCHAR2	80	
TRANSFER_STATUS		N	CHAR	1	
TRANSFER_TYPE		N	VARCHAR2	3	
EXTERNAL_LABEL		Y	VARCHAR2	80	
FILE_TYPE		Y	CHAR	1	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE a product for one and only one FOREIGN-HOST

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (20 of 52)

Entity Name : FOREIGN-HOST
Short Name : FH

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains information about foreign hosts to whom we transmit files.

Attributes

Name	Domain	Opt	Format	Length	
ADDRESS		N	VARCHAR2	15	*
DEF_TARGET_PATH		Y	VARCHAR2	80	
HOST_NAME		Y	VARCHAR2	15	
PASSWD		Y	VARCHAR2	12	
USER_ID		Y	VARCHAR2	15	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE the target of one or more FILE-TRANSFERS

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (21 of 52)

Entity Name : GEODETIC_STAT

Short Name : GEOD

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds geodetic trending statistics for
a work-order-processed scene.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one PROC_SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (22 of 52)

Entity Name : GEOMETRIC_STAT

Short Name : GEOM

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds geometric accuracy trending statistics for
a work-order-processed scene.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one PROC_SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (23 of 52)

Entity Name : I2I_STAT

Short Name : I2I

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds image-to-image trending statistics for
a work-order-processed scene.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one PROC_SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (24 of 52)

Entity Name : IPC-DIRECTIVE

Short Name : IPC

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains inter-process communication directives

Attributes

Name	Domain	Opt	Format	Length	
DATE_SENT		N	TIMESTAMP		*
DIRECTIVE		N	VARCHAR2	80	
RECIPIENT		N	VARCHAR2	6	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (25 of 52)

Entity Name : L0R-DATA-CATALOG

Short Name : L0R

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains a catalog of L0R products.

Attributes

Name	Domain	Opt	Format	Length	
ARCHIVED	TRUE/FALSE	N	NUMBER	1,0	
DELETE_FILES		N	NUMBER	1,0	
L0R_PRODUCT_ID	ECS_GEN_FILENAME	N	CHAR	8	*
PATH		N	VARCHAR2	80	
DATE_FILE_RECEIVED		Y	DATE		
INGEST_DATE		Y	DATE		
INGEST_FAILURE_REASON		Y	NUMBER	1,0	
INGEST_STATUS		Y	CHAR	1	
L0R_PRODUCT_DESC		Y	VARCHAR2	80	
VALID_ACQ_DATE	TRUE/FALSE	Y	NUMBER	1,0	
VALID_BAND_CAL_FIELD	TRUE/FALSE	Y	NUMBER	1,0	
VALID_BAND_CAL_LINES	TRUE/FALSE	Y	NUMBER	1,0	
VALID_BAND_FIELD	TRUE/FALSE	Y	NUMBER	1,0	
VALID_BAND_LINES	TRUE/FALSE	Y	NUMBER	1,0	
VALID_CORNERS	TRUE/FALSE	Y	NUMBER	1,0	
VALID_CPF_VS_DB	TRUE/FALSE	Y	NUMBER	1,0	
VALID_CPF_VS_METADATA	TRUE/FALSE	Y	NUMBER	1,0	
VALID_MSCD_FORMATS	TRUE/FALSE	Y	NUMBER	1,0	
VALID_MSCD_TIME_RANGE	TRUE/FALSE	Y	NUMBER	1,0	
VALID_PCD_TIME_RANGE	TRUE/FALSE	Y	NUMBER	1,0	
VALID_SCAN_LINE_OFFSETS	TRUE/FALSE	Y	NUMBER	1,0	
VALID_SCAN_LINE_OFFSETS_LHS	TRUE/FALSE	Y	NUMBER	1,0	
VALID_SCAN_LINE_OFFSETS_RHS	TRUE/FALSE	Y	NUMBER	1,0	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

Table 11–2. ERD Entities (26 of 52)

MAY BE	processed by one or more	WORK-ORDERS
MAY BE	the basis for one or more	L1RG-DATA-CATALOG
MUST BE	made up of one or more	SCENES

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (27 of 52)

Entity Name : L1RG-DATA-CATALOG

Short Name : L1RG

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains a catalog of L1R and L1G products that are the outputs from running a work order against a L0R image.

Attributes

Name	Domain	Opt	Format	Length
DELETE_FILES		N	NUMBER	1,0
PATH		N	VARCHAR2	80
L1RG_PRODUCT_DESC		Y	VARCHAR2	80

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE produced by one and only one WORK-ORDER

MUST BE the result of processing one and only one L0R-DATA-CATALOG

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (28 of 52)

Entity Name : MESSAGE

Short Name : MSG

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains a catalog of standard messages.

Attributes

Name	Domain	Opt	Format	Length	
MESSAGE_ID		N	NUMBER	3,0	*
MESSAGE_TEXT		N	VARCHAR2	80	
SEVERITY		N	CHAR	1	
MESSAGE_THRESHOLD		Y	NUMBER	5,0	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE the template for one or more EVENTS

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (29 of 52)

Entity Name : MIRROR_STAT
Short Name : MS

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds scan mirror trending statistics for
a work-order-processed scene.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one PROC_SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (30 of 52)

Entity Name : MODULE

Short Name : MOD

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Allows creation of various levels of application software "building blocks", e.g., procedures, scripts, and programs.

Attributes

Name	Domain	Opt	Format	Length	
MODULE_ID		N	VARCHAR2	15	*
TYPE		N	VARCHAR2	9	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	invoked by one or more	WORK-ORDERS
MAY BE	the invoker of one or more	SUB-MODULES

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (31 of 52)

Entity Name : NOMINAL-LOR-STATS

Short Name : NLS

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains nominal L0R statistics for comparison against actual L0R products during ingest.

Attributes

Name	Domain	Opt	Format	Length
DETECTOR_DWELL_TIME		N	INTEGER	4
EST_AVG_L0R_SIZE		N	NUMBER	5,2
MAX_PCD_TIME_CORR		N	INTEGER	3
MAX_PCD_TIME_DELTA		N	INTEGER	3
NOMINAL_ANG_MOMENTUM		N	NUMBER	5,2
NOMINAL_DELTA_ADS_PITCH		N	INTEGER	2
NOMINAL_DELTA_ADS_ROLL		N	INTEGER	2
NOMINAL_DELTA_ADS_YAW		N	INTEGER	2
NOMINAL_DELTA_EPA1		N	NUMBER	4,2
NOMINAL_DELTA_EPA2		N	NUMBER	4,2
NOMINAL_DELTA_EPA3		N	NUMBER	4,2
NOMINAL_DELTA_EPA4		N	NUMBER	4,2
NOMINAL_DELTA_PITCH		N	INTEGER	2
NOMINAL_DELTA_ROLL		N	INTEGER	2
NOMINAL_DELTA_SCAN_START_TIMES		N	INTEGER	3
NOMINAL_DELTA_YAW		N	INTEGER	2
NOMINAL_FWD_FHSERR		N	INTEGER	4
NOMINAL_FWD_FHSTIME		N	INTEGER	4
NOMINAL_FWD_SHSERR		N	INTEGER	4
NOMINAL_FWD_SHSTIME		N	INTEGER	4
NOMINAL_INCLINATION		N	NUMBER	5,2
NOMINAL_LINE_LENGTH		N	INTEGER	4
NOMINAL_REV_FHSERR		N	INTEGER	4
NOMINAL_REV_FHSTIME		N	INTEGER	4
NOMINAL_REV_SHSERR		N	INTEGER	4
NOMINAL_REV_SHSTIME		N	INTEGER	4
NOMINAL_SEMIMAJOR_AXIS		N	NUMBER	4,2

Table 11–2. ERD Entities (32 of 52)

SCAN_ERR_CTS_CONV	N	INTEGER	3

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (33 of 52)

Entity Name : PCD-MAJOR-FRAME

Short Name : PMF

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains statistics, used for trend analysis, about PCD major frames contained in a L0R product. The statistics are generated during ingest.

Attributes

Name	Domain	Opt	Format	Length	
MAJOR_FRAME_COUNTER		N	NUMBER	3,0	*
TEMP_AMBIENT_PREAMP_HIGH_CH	TEMPERATURE	Y	NUMBER	3,0	
TEMP_AMBIENT_PREAMP_LOW_CH	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BACKUP_SHUTTER_FLAG	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BAFFLE_HEATER	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BAFFLE_SUPPORT	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BAFFLE_TUBE	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BAND4_POSTAMP	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BAND7_PREAMP	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BASEPLATE_HOUSING	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BLACKBODY_CTL	TEMPERATURE	Y	NUMBER	3,0	
TEMP_BLACKBODY_ISO	TEMPERATURE	Y	NUMBER	3,0	
TEMP_CAL_LAMP_HOUSING	TEMPERATURE	Y	NUMBER	3,0	
TEMP_CAL_SHUTTER_FLAG	TEMPERATURE	Y	NUMBER	3,0	
TEMP_CAL_SHUTTER_HUB	TEMPERATURE	Y	NUMBER	3,0	
TEMP_CFPA_CTL	TEMPERATURE	Y	NUMBER	3,0	
TEMP_CFPA_MONITOR	TEMPERATURE	Y	NUMBER	3,0	
TEMP_MEM_HEAT_SINK_PS1	TEMPERATURE	Y	NUMBER	3,0	
TEMP_MEM_HEAT_SINK_PS2	TEMPERATURE	Y	NUMBER	3,0	
TEMP_MUX1_ELECTRONICS	TEMPERATURE	Y	NUMBER	3,0	
TEMP_MUX1_POWER_SUPPLY	TEMPERATURE	Y	NUMBER	3,0	
TEMP_MUX2_ELECTRONICS	TEMPERATURE	Y	NUMBER	3,0	
TEMP_MUX2_POWER_SUPPLY	TEMPERATURE	Y	NUMBER	3,0	

Table 11–2. ERD Entities (34 of 52)

TEMP_PANBAND_POSTAMP	TEMPERATURE	Y	NUMBER	3,0
TEMP_PRIMARY_MIRROR	TEMPERATURE	Y	NUMBER	3,0
TEMP_PRIMARY_MIRROR_MASK	TEMPERATURE	Y	NUMBER	3,0
TEMP_SCAN_LINE_CORRECTOR	TEMPERATURE	Y	NUMBER	3,0
TEMP_SECONDARY_MIRROR	TEMPERATURE	Y	NUMBER	3,0
TEMP_SECONDARY_MIRROR_MASK	TEMPERATURE	Y	NUMBER	3,0
TEMP_SILICON_FP_ASSEMBLY	TEMPERATURE	Y	NUMBER	3,0
TEMP_TELESCOPE_BASEPLATE	TEMPERATURE	Y	NUMBER	3,0
TEMP_TELESCOPE_HOUSING	STD_DEVIATION	Y	NUMBER	
TEMP_TIME_FIT		Y	NUMBER	
TIME_DRIFT_ACCELN_C2		Y	NUMBER	2,0
TIME_DRIFT_BIAS_C0		Y	NUMBER	2,0
TIME_DRIFT_RATE_C1		Y	NUMBER	2,0
TIME_ON_JDAY		Y	NUMBER	3,0
TIME_ON_MSEC		Y	NUMBER	8,0

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (35 of 52)

Entity Name : PIXEL
Short Name : PIX

Sub-type of :

Initial Volume : 0
Maximum Volume : 0
Average Volume : 0
Annual Growth% : 0

Description - has Significance as

Holds trending statistics by pixel.

Attributes

Name	Domain	Opt	Format	Length
PIXEL_NBR		N	NUMBER	5,0

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE a part of one and only one SCAN_LINE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (36 of 52)

Entity Name : PROC_SCENE

Short Name : PS

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics for each work-order-processed scene.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	the owner of one or more	GEODETIC_STATS
MAY BE	the owner of one or more	GEOMETRIC_STATS
MAY BE	the owner of one or more	I2I_STATS
MAY BE	the owner of one or more	MIRROR_STATS
MAY BE	the owner of one or more	S_ALIGN_STATS
MUST BE	made up of one or more	BANDS
MUST BE	produced by one and only one	WORK-ORDER
MUST BE	the result of processing one and only one	SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (37 of 52)

Entity Name : PRODUCT-REQUEST

Short Name : PR

Sub-type of :

Initial Volume : Average Volume :

Maximum Volume : Annual Growth% :

Description - has Significance as

Contains information pertaining to a product request.

Attributes

Name	Domain	Opt	Format	Length
PRODUCT_REQUEST_ID		N	VARCHAR2	6
PRODUCT_SELECTION		N	CHAR	1
STATUS		N	CHAR	1
TIME_COMPLETED		N	DATE	
WRS_PATH		N	NUMBER	3,0
WRS_ROW		N	NUMBER	3,0
CALIBRATI0N_OPTION		Y	CHAR	1
CANCELLATION_REQUEST		Y	CHAR	1
COORDINATE_REFERENCE		Y	CHAR	1
GRID_CELL		Y	NUMBER	2,0
ORIENTATION		Y	CHAR	1
OUTPUT_FORMAT		Y	CHAR	1
RESAMPLING_FILTER		Y	CHAR	1
SPECTRAL_BANDS		Y	NUMBER	1,0
TIME_RECEIVED		Y	DATE	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE the producer of one or more WORK-ORDERS

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (38 of 52)

Entity Name : REGION
Short Name : REGION

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by region.

Attributes

Name	Domain	Opt	Format	Length
REGION_LOC		N	CHAR	1

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE owned by one and only one SCAN_LINE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (39 of 52)

Entity Name : SCAN
Short Name : SCAN

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by scan number.

Attributes

Name	Domain	Opt	Format	Length
SCAN_DIR		N	CHAR	1
SCAN_NBR		N	NUMBER	5,0
SCS_LEVEL		N	CHAR	1

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE	made up of one or more	SCAN_LINES
MUST BE	recorded for one and only one	BAND

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (40 of 52)

Entity Name : SCAN_GROUP
Short Name : SG

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by scan direction.

Attributes

Name	Domain	Opt	Format	Length
SCAN_DIR		N	CHAR	1

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	made up of one or more	DET_AGGREGATES
MUST BE	statistics for one and only one	BAND

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (41 of 52)

Entity Name : SCAN_LINE

Short Name : SL

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics for each scan line
(scan number cross-referenced by detector).

Attributes

Name	Domain	Opt	Format	Length
DETECTOR_NBR		N	NUMBER	2,0

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	made up of one or more	PIXELS
MAY BE	the owner of one or more	REGIONS
MUST BE	a part of one and only one	SCAN

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (42 of 52)

Entity Name : SCENE

Short Name : SCENE

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains statistics, used for trend analysis, about scenes contained in a L0R product. The statistics are generated during ingest.

Attributes

Name	Domain	Opt	Format	Length	
FULL_OR_PARTIAL		N	CHAR	1	
SCENE_CENTER_SCAN_TIME		N	DATE		
SCENE_TYPE		N	CHAR	1	
WRS_PATH		N	NUMBER	3,0	*
WRS_ROW		N	NUMBER	3,0	*
AVG_ANG_MOMENTUM		Y	NUMBER	5,2	
AVG_DELTA_ADS_PITCH		Y	NUMBER	4,2	
AVG_DELTA_ADS_ROLL		Y	NUMBER	4,2	
AVG_DELTA_ADS_YAW		Y	NUMBER	4,2	
AVG_DELTA_EPA1		Y	NUMBER	4,2	
AVG_DELTA_EPA2		Y	NUMBER	4,2	
AVG_DELTA_EPA3		Y	NUMBER	4,2	
AVG_DELTA_EPA4		Y	NUMBER	4,2	
AVG_DELTA_PITCH		Y	NUMBER	4,2	
AVG_DELTA_ROLL		Y	NUMBER	4,2	
AVG_DELTA_SCAN_START_TIMES	AVERAGE	Y	NUMBER	4,2	
AVG_DELTA_YAW		Y	NUMBER	4,2	
AVG_DIFF_FWD_FHSERR	AVERAGE	Y	NUMBER	4,2	
AVG_DIFF_FWD_SHSERR	AVERAGE	Y	NUMBER	4,2	
AVG_DIFF_REV_FHSERR	AVERAGE	Y	NUMBER	4,2	
AVG_DIFF_REV_SHSERR	AVERAGE	Y	NUMBER	4,2	
AVG_INCLINATION		Y	NUMBER	5,2	
AVG_LINE_LENGTH	AVERAGE	Y	NUMBER	4,2	
AVG_SEMIMAJOR_AXIS		Y	NUMBER	5,2	
BAD_ON_TIME	TRUE/FALSE	Y	NUMBER	1,0	
BAD_TIME_COEFS	TRUE/FALSE	Y	NUMBER	1,0	
DIFF_ON_TIME-MF1_TIME		Y	NUMBER	4,0	
NBR_BAD_ADS_PITCH	BAD_STAT	Y	NUMBER	3,0	

Table 11–2. ERD Entities (43 of 52)

NBR_BAD_ADS_ROLL	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_ADS_YAW	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_ANG_MOMENTUM	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_DRIFT_PITCH	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_DRIFT_ROLL	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_DRIFT_YAW	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_EPA1	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_EPA2	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_EPA3	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_EPA4	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_EPHEM_PTS	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_FHSERR	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_INCLINATION	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_LINE_LENGTHS	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_LINE_LENGTHS_CALC	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_PITCH	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_ROLL	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_SCAN_DIR_FLAGS	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_SCAN_START_TIMES	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_SEMIMAJOR_AXIS	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_SHSERR	BAD_STAT	Y	NUMBER	3,0
NBR_BAD_YAW	BAD_STAT	Y	NUMBER	3,0
NBR_LINES_IN_SCENE		Y	NUMBER	5,0
NBR_STAR_SIGHTINGS	BAD_STAT	Y	NUMBER	3,0
STD_DEV_ANG_MOMENTUM		Y	NUMBER	4,2
STD_DEV_DELTA_ADS_PITCH		Y	NUMBER	4,2
STD_DEV_DELTA_ADS_ROLL		Y	NUMBER	4,2
STD_DEV_DELTA_ADS_YAW		Y	NUMBER	4,2
STD_DEV_DELTA_EPA1		Y	NUMBER	4,2
STD_DEV_DELTA_EPA2		Y	NUMBER	4,2
STD_DEV_DELTA_EPA3		Y	NUMBER	4,2
STD_DEV_DELTA_EPA4		Y	NUMBER	4,2
STD_DEV_DELTA_PITCH		Y	NUMBER	4,2
STD_DEV_DELTA_ROLL		Y	NUMBER	4,2
STD_DEV_DELTA_START_TIME		Y	NUMBER	4,2

Table 11–2. ERD Entities (44 of 52)

STD_DEV_DELTA_YAW	Y	NUMBER	4,2
STD_DEV_DIFF_FWD_FHS ERR	Y	NUMBER	4,2
STD_DEV_DIFF_FWD_SHS ERR	Y	NUMBER	4,2
STD_DEV_DIFF_REV_FHS ERR	Y	NUMBER	4,2
STD_DEV_DIFF_REV_SHS ERR	Y	NUMBER	4,2
STD_DEV_INCLINATION	Y	NUMBER	4,2
STD_DEV_LINE_LENGTH	Y	NUMBER	4,2
STD_DEV_SEMIMAJOR_AXIS	Y	NUMBER	4,2

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	the basis for one or more	PROC_SCENES
MUST BE	a part of one and only one	L0R-DATA-CATALOG
MUST BE	associated with one or more	PCD-MAJOR-FRAMES

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (45 of 52)

Entity Name : SEGMENT

Short Name : SEG

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds trending statistics by segment.

Attributes

Name	Domain	Opt	Format	Length	
SEGMENT_NBR		N	NUMBER	1,0	*

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE a part of one and only one DET_AGGREGATE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (46 of 52)

Entity Name : SUB-MODULE

Short Name : SM

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Allows the definition of sub-modules for modules
(e.g., procedures are made up of scripts,
and scripts are made up of programs).

Attributes

Name	Domain	Opt	Format	Length	
SUB_MODULE_ID		N	VARCHAR2	15	*
SEQ_NBR		Y	INTEGER	2	

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	the user of one or more	DEF-PARMS
MUST BE	invoked by one and only one	MODULE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (47 of 52)

Entity Name : SYS-PARMS

Short Name : SYS

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains system-wide parameters

Attributes

Name	Domain	Opt	Format	Length
CHECK_DISK_INTERVAL		N	INTEGER	5
DELETION_INTERVAL		N	INTEGER	5
DISK_FIRST_ADVISORY_LIMIT		N	NUMBER	3,2
DISK_SECOND_ADVISORY_LIMIT		N	NUMBER	3,2
MAX_CONCURRENT_WO		N	INTEGER	2
PSI_POLLING_INTERVAL		N	INTEGER	5
RESOURCE_MONITOR_INTERVAL		N	INTEGER	5
WORK_ORDER_CONTROLLER_INTERVAL		N	INTEGER	5
WORK_ORDER_SCHEDULER_INTERVAL		N	INTEGER	5

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (48 of 52)

Entity Name : S_ALIGN_STAT

Short Name : SAS

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Holds sensor alignment trending statistics for
a work-order-processed scene.

Attributes

Name	Domain	Opt	Format	Length

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE statistics for one and only one PROC_SCENE

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (49 of 52)

Entity Name : WO-PARM

Short Name : WP

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Identifies the actual parameters to be used by a program in a WO-Procedure.

Attributes

Name	Domain	Opt	Format	Length
PARM_VALUE		N	VARCHAR2	15

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MUST BE	an argument for one and only one	WO-SCRIPT
MUST BE	an occurrence of one and only one	DEF-PARM

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (50 of 52)

Entity Name : WO-SCRIPT

Short Name : WS

Sub-type of :

Initial Volume : 0 Average Volume : 0

Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains information about a script which is part of a work-order's procedure.

Attributes

Name	Domain	Opt	Format	Length
PAUSE_FLAG		N	INTEGER	1
SCRIPT_ID		N	VARCHAR2	15
STATE		N	CHAR	1
COMPL_STATUS		Y	CHAR	1
PROCESS_ID		Y	INTEGER	4

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	the generator of one or more	EVENTS
MAY BE	the user of one or more	WO-PARMS
MUST BE	a part of one and only one	WORK-ORDER

* - Relationships in primary unique identifier

Notes and Remarks

Table 11–2. ERD Entities (51 of 52)

Entity Name : WORK-ORDER
Short Name : WO

Sub-type of :

Initial Volume : 0 Average Volume : 0
Maximum Volume : 0 Annual Growth% : 0

Description - has Significance as

Contains information pertaining to a work order.

Attributes

Name	Domain	Opt	Format	Length
ARCHIVED		N	NUMBER	1,0
DATE_ENTERED		N	DATE	
DELETE_OUTPUTS		N	NUMBER	1,0
PRIORITY		N	NUMBER	1,0
REQUESTER		N	VARCHAR2	15
REQUEST_TYPE		N	CHAR	1
STATE		N	CHAR	1
WORK_ORDER_ID		N	VARCHAR2	6
ACT_COMPL_DATE		Y	DATE	
DATE_L0R_REQUESTED		Y	DATE	
EPHEM_TYPE		Y	VARCHAR2	1
L0R_PATH		Y	VARCHAR2	80
REQ_COMPL_DATE		Y	DATE	
REQ_START_DATE		Y	DATE	
WO_COMMENT		Y	VARCHAR2	80
WO_PATH		Y	VARCHAR2	80

* - Attributes in primary unique identifier

Relationships

Each Occurrence Of This Entity :

MAY BE	Produced by one and only one	PRODUCT-REQUEST
MAY BE	the invoker of one and only one	MODULE
MAY BE	the owner of one or more	ANOMALIES
MAY BE	the processor of one and only one	L0R-DATA-CATALOG
MAY BE	the producer of one or more	L1RG-DATA-CATALOG
MAY BE	the producer of one or more	PROC_SCENES
MUST BE	the vehicle for running one or more	WO-SCRIPTS

* - Relationships in primary unique identifier

Table 11–2. ERD Entities (52 of 52)

Notes and Remarks